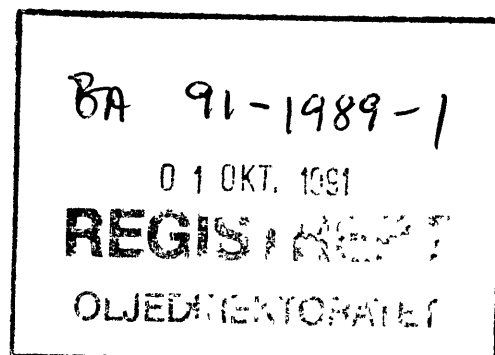


GEOCHEMICAL ANALYSIS REPORT  
WELL NOCS 33/9-10

Authors: Kjell Arne Bakken  
Lorraine Buxton  
Ian L. Ferriday

Geolab Nor A/S  
Hornebergveien 5  
7038 Trondheim  
Norway

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## INTRODUCTION

Well NOCS 33/9-10 is situated to the north of the Murchison field in the Norwegian sector of the North Sea. The well is located at 61°28'00.21"N and 01°46'29.65"E at a water depth of 162 m. Elevation of Kelly Bushing (KB) above mean sea level was 26 m. The total drilled depth was 3716 m. Samples were collected between 1901 m and 3713 m from the Norwegian Petroleum Directorate in Stavanger. A total of 127 samples was collected, washed (only the cuttings samples) and described. The analysed section of the well is from 1901 m to 3713 m with a sampling interval of 6 to 30 m for the cuttings samples and variable intervals for the core chip samples. A careful selection of suitable samples was made for screening analysis (i.e. TOC and Rock-Eval analysis). Fifty-two samples were selected for this analysis, and from the data obtained samples were chosen for follow-up analyses. These were:

Thermal extraction - pyrolysis - gas chromatography	10 samples
Extraction, MPLC fractionation, saturated and aromatic hydrocarbon gas chromatography	8 samples
Vitrinite reflectance microscopy	13 samples
Visual kerogen analysis	8 samples
Isotope analysis of C15+ fractions	3 samples
Gas chromatography - mass spectrometry	3 samples

Tables listing in detail which samples were analysed and the results are located in Appendix 1.

Table 1 : Lithology description for well NOCS 33/9-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
1901.00						0001
	1.15		80	Sh/Clst: ol gy to lt ol gy		0001-1L
			20	Cont : cem, prp		0001-2L
1931.00						0002
			80	Sh/Clst: ol gy to lt ol gy		0002-1L
			20	Cont : cem, prp		0002-2L
1961.00						0003
			90	Sh/Clst: ol gy to lt ol gy, gn gy		0003-1L
			10	Cont : cem, prp		0003-2L
1991.00						0004
			90	Sh/Clst: ol gy to lt ol gy, gn gy		0004-1L
			10	Cont : cem, prp		0004-2L
2021.00						0005
	1.42		95	Sh/Clst: ol gy to lt ol gy		0005-1L
			5	Cont : cem, prp		0005-2L
			tr	S/Sst : w, l		0005-3L
2051.00						0006
			95	Sh/Clst: ol gy to lt ol gy		0006-1L
			5	Cont : cem, prp		0006-2L
			tr	S/Sst : w, l		0006-3L

Table 1 : Lithology description for well NOCS 33/9-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample	
Int Cvd	TOC%	%	Lithology description				
2081.00						0007	
		95	Sh/Clst:	ol gy to lt ol gy		0007-1L	
		5	Cont	: cem, prp		0007-2L	
		tr	S/Sst	: w, l		0007-3L	
2111.00						0008	
	1.33	95	Sh/Clst:	ol gy to lt ol gy		0008-1L	
		5	Cont	: cem, prp		0008-2L	
		tr	S/Sst	: w, l		0008-3L	
2141.00						0009	
		95	Sh/Clst:	ol gy to lt ol gy		0009-1L	
		5	Cont	: cem, prp, fib		0009-2L	
		tr	S/Sst	: w, l		0009-3L	
		tr	Other	: glauc		0009-4L	
2171.00						0010	
		95	Sh/Clst:	ol gy to lt ol gy		0010-1L	
		5	Cont	: cem, prp, fib		0010-2L	
		tr	S/Sst	: w, l		0010-3L	
		tr	Other	: glauc		0010-4L	
2201.00						0011	
	1.18	100	Sh/Clst:	ol gy		0011-1L	
		tr	Cont	: cem, prp, fib		0011-2L	
2231.00						0012	
		100	Sh/Clst:	ol gy		0012-1L	
		tr	Cont	: cem, prp, fib		0012-2L	

Table 1 : Lithology description for well NOCS 33/9-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2261.00						0013
				100 Sh/Clst: ol gy to gn gy		0013-1L
				tr Cont : cem, prp, fib		0013-2L
2291.00						0014
				70 Sh/Clst: ol gy to gn gy		0014-1L
				20 Cont : Coal-ad		0014-2L
				10 Sh/Clst: gy red		0014-3L
2318.00						0015
	1.12			80 Sh/Clst: ol gy to gn gy		0015-1L
				20 Cont : Coal-ad		0015-2L
				tr Sh/Clst: gy red		0015-3L
2348.00						0016
				90 Sh/Clst: ol gy to m gy		0016-1L
				10 Cont : Coal-ad		0016-2L
				tr Sh/Clst: gy red		0016-3L
2378.00						0017
				90 Sh/Clst: ol gy to m gy		0017-1L
				10 Cont : Coal-ad		0017-2L
				tr Sh/Clst: gy red		0017-3L
2408.00						0018
				60 Cont : Coal-ad		0018-2L
				40 Sh/Clst: ol gy to m gy		0018-1L

Table 1 : Lithology description for well NOCS 33/9-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2438.00						0019
				60 Cont : Coal-ad		0019-2L
				40 Sh/Clst: ol gy to m gy		0019-1L
2477.00						0020
				70 Cont : Coal-ad		0020-2L
				30 Sh/Clst: ol gy to m gy		0020-1L
2507.00						0021
				90 Cont : Coal-ad		0021-2L
				10 Sh/Clst: ol gy to m gy		0021-1L
2537.00						0022
	1.68			80 Sh/Clst: ol gy to m gy		0022-1L
				10 Cont : Coal-ad		0022-2L
				5 Sh/Clst: gy red		0022-3L
				5 S/Sst : w to lt gy, f, cem		0022-4L
2570.00						0023
				80 Sh/Clst: ol gy to m gy		0023-1L
				10 Cont : Coal-ad		0023-2L
				10 S/Sst : w to lt gy, f, cem		0023-4L
				tr Sh/Clst: gy red		0023-3L
2600.00						0024
				80 Sh/Clst: ol gy to m gy		0024-1L
				10 Cont : Coal-ad		0024-2L
				10 S/Sst : w to lt gy, f, cem		0024-4L
				tr Sh/Clst: gy red		0024-3L

Table 1 : Lithology description for well NOCS 33/9-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2630.00						0025
	1.87	80		Sh/Clst: ol gy to m gy		0025-1L
		20		Cont : Coal-ad		0025-2L
				tr Sh/Clst: gy red		0025-3L
				tr S/Sst : w to lt gy, f, cem		0025-4L
2660.00						0026
		100		Sh/Clst: ol gy to m gy		0026-1L
				tr Cont : Coal-ad		0026-2L
				tr Sh/Clst: gy red		0026-3L
				tr S/Sst : w to lt gy, f, cem		0026-4L
2690.00						0027
		100		Sh/Clst: ol gy to m gy		0027-1L
				tr Cont : Coal-ad		0027-2L
				tr Sh/Clst: gy red		0027-3L
				tr S/Sst : w to lt gy, f, cem		0027-4L
2710.00						0028
	1.07	100		Sh/Clst: ol gy to m gy to m drk gy		0028-1L
				tr Cont : Coal-ad		0028-2L
				tr Sh/Clst: gy red		0028-3L
				tr S/Sst : w to lt gy, f, cem		0028-4L
2753.00						0029
		100		Sh/Clst: ol gy to m gy to m drk gy		0029-1L
				tr Cont : Coal-ad		0029-2L
				tr Sh/Clst: gy red		0029-3L
				tr S/Sst : w to lt gy, f, cem		0029-4L

Table 1 : Lithology description for well NOCS 33/9-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2780.00						0030
			100	Sh/Clst: ol gy to m gy to m drk gy		0030-1L
				tr Cont : Coal-ad		0030-2L
				tr Sh/Clst: gy red		0030-3L
				tr S/Sst : w to lt gy, f, cem		0030-4L
2810.00						0031
			100	Sh/Clst: ol gy to m gy to m drk gy		0031-1L
				tr Sh/Clst: gy red		0031-2L
				tr S/Sst : w to lt gy, f, cem		0031-3L
2852.00						0032
	0.73		100	Sh/Clst: ol gy to m gy to m drk gy		0032-1L
				tr Sh/Clst: gy red		0032-2L
				tr S/Sst : w to lt gy, f, cem		0032-3L
2882.00						0033
			100	Sh/Clst: ol gy to m gy to drk gy, calc		0033-1L
				tr Cont : prp		0033-2L
2921.00						0034
			100	Sh/Clst: ol gy to m gy to drk gy, calc		0034-1L
				tr Cont : prp		0034-2L
2951.00						0035
			100	Sh/Clst: ol gy to m gy to drk gy, calc		0035-1L
				tr Cont : prp		0035-2L
				tr Sh/Clst: gy red, gn gy		0035-3L



Table 1 : Lithology description for well NOCS 33/9-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
2981.00						0036
	0.57	100	Sh/Clst:	ol gy to m gy to drk gy, calc		0036-1L
			tr Cont	: Coal-ad, prp		0036-2L
			tr Sh/Clst:	gy red, gn gy		0036-3L
3011.00						0037
		100	Sh/Clst:	ol gy to m gy to drk gy, calc		0037-1L
			tr Cont	: Coal-ad, prp		0037-2L
			tr Sh/Clst:	gy red, gn gy		0037-3L
3041.00						0038
		100	Sh/Clst:	ol gy to m gy to drk gy, calc		0038-1L
			tr Cont	: Coal-ad, prp		0038-2L
			tr Sh/Clst:	gy red, gn gy		0038-3L
3071.00						0039
		100	Sh/Clst:	ol gy to m gy to drk gy, calc		0039-1L
			tr Cont	: Coal-ad, prp		0039-2L
			tr Sh/Clst:	gy red, gn gy		0039-3L
3101.00						0040
		100	Sh/Clst:	ol gy to m gy to drk gy, calc		0040-1L
			tr Cont	: Coal-ad, prp		0040-2L
			tr Sh/Clst:	gy red, gn gy		0040-3L
3131.00						0041
	0.61	95	Sh/Clst:	lt gy to drk gy, calc		0041-1L
		5	Sh/Clst:	gy red, gn gy		0041-3L
			tr Cont	: Coal-ad, prp		0041-2L

Table 1 : Lithology description for well NOCS 33/9-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3170.00						0042
				95 Sh/Clst: lt gy to drk gy, calc		0042-1L
				5 Sh/Clst: gy red, gn gy		0042-3L
				tr Cont : Coal-ad, prp		0042-2L
3200.00						0043
				95 Sh/Clst: lt gy to drk gy, calc		0043-1L
				5 Sh/Clst: gy red, gn gy		0043-3L
				tr Cont : Coal-ad, prp		0043-2L
3224.00						0044
	0.98		100	Sh/Clst: lt gy to drk gy, calc		0044-1L
				tr Cont : Coal-ad, prp		0044-2L
				tr Sh/Clst: gy red, gn gy		0044-3L
3230.00						0045
			100	Sh/Clst: lt gy to drk gy, calc		0045-1L
				tr Cont : Coal-ad, prp		0045-2L
				tr Sh/Clst: gy red, gn gy		0045-3L
3236.00						0046
	1.03		100	Sh/Clst: lt gy to drk gy, calc		0046-1L
				tr Cont : Coal-ad, prp		0046-2L
				tr Sh/Clst: red brn, gn gy		0046-3L
3242.00						0047
			90	Sh/Clst: lt gy to drk gy, calc		0047-1L
			10	Sh/Clst: red brn, gn gy		0047-3L
				tr Cont : Coal-ad, prp		0047-2L

Table 1 : Lithology description for well NOCS 33/9-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3248.00						0048
		0.91		90 Sh/Clst: lt gy to drk gy, calc 10 Sh/Clst: red brn, gn gy tr Cont : Coal-ad, prp		0048-1L 0048-3L 0048-2L
3254.00						0049
		1.08		90 Sh/Clst: lt gy to drk gy, calc 10 Sh/Clst: red brn, gn gy tr Cont : Coal-ad, prp		0049-1L 0049-3L 0049-2L
3260.00						0050
	cvd			90 Sh/Clst: lt gy to drk gy, calc		0050-1L
	cvd			5 Sh/Clst: red brn, gn gy		0050-2L
	cvd			5 Ca : w		0050-3L
3266.00						0051
	cvd			70 Sh/Clst: lt gy to drk gy, calc		0051-1L
		6.87		20 Sh/Clst: brn blk, mic		0051-4L
	cvd			5 Sh/Clst: red brn, gn gy		0051-2L
	cvd			5 Ca : w		0051-3L
3272.00						0052
	cvd			50 Sh/Clst: lt gy to drk gy, calc		0052-1L
		6.02		40 Sh/Clst: brn blk, mic		0052-4L
	cvd			5 Sh/Clst: red brn, gn gy		0052-2L
	cvd			5 S/Sst : w, f, l		0052-5L
	cvd			tr Ca : w		0052-3L

Table 1 : Lithology description for well NOCS 33/9-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3278.00						0053
	cvd			90 Sh/Clst: lt gy to drk gy, calc		0053-1L
	cvd			5 Sh/Clst: red brn, gn gy		0053-2L
				5 Sh/Clst: brn blk, mic		0053-3L
3284.00						0054
	cvd			90 Sh/Clst: lt gy to drk gy, calc		0054-1L
	cvd			5 Sh/Clst: red brn, gn gy		0054-2L
				5 Sh/Clst: brn blk, mic		0054-3L
3290.00						0055
	cvd			55 Sh/Clst: lt gy to drk gy, calc		0055-1L
		4.86		40 Sh/Clst: brn blk, mic		0055-3L
	cvd			5 Sh/Clst: red brn, gn gy		0055-2L
3296.00						0056
	cvd			70 Sh/Clst: lt gy to drk gy, calc		0056-1L
		6.72		25 Sh/Clst: brn blk, mic		0056-3L
	cvd			5 Sh/Clst: red brn, gn gy		0056-2L
3302.00						0057
	cvd			80 Sh/Clst: lt gy to drk gy, calc		0057-1L
		3.47		15 Sh/Clst: brn blk, mic		0057-3L
	cvd			5 Sh/Clst: red brn, gn gy		0057-2L
3308.00						0058
	cvd			75 Sh/Clst: lt gy to drk gy, calc		0058-1L
		4.51		20 Sh/Clst: brn blk, mic		0058-3L
	cvd			5 Sh/Clst: red brn, gn gy		0058-2L

Table 1 : Lithology description for well NOCS 33/9-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3314.00						0059
	cvd		65	Sh/Clst: lt gy to drk gy, calc		0059-1L
		4.05	30	Sh/Clst: brn blk, mic		0059-3L
	cvd		5	Sh/Clst: red brn, gn gy		0059-2L
3320.00						0060
		8.75	50	Sh/Clst: brn blk, mic		0060-3L
	cvd		45	Sh/Clst: lt gy to drk gy, calc		0060-1L
	cvd		5	Sh/Clst: red brn, gn gy		0060-2L
3326.00						0061
		8.40	50	Sh/Clst: brn blk, mic		0061-3L
	cvd		45	Sh/Clst: lt gy to drk gy, calc		0061-1L
	cvd		5	Sh/Clst: red brn, gn gy		0061-2L
3332.00						0062
			50	Sh/Clst: lt gy to drk gy, calc		0062-1L
		8.33	45	Sh/Clst: brn blk, mic		0062-3L
	cvd		5	Sh/Clst: red brn, gn gy		0062-2L
3338.00						0063
			65	Sh/Clst: lt gy to drk gy, calc		0063-1L
		10.38	30	Sh/Clst: brn blk, mic		0063-3L
	cvd		5	Sh/Clst: red brn, gn gy		0063-2L
			tr Ca	: dsk y brn, dol		0063-4L
3344.00						0064
			65	Sh/Clst: lt gy to drk gy, calc		0064-1L
		3.77	30	Sh/Clst: brn blk, mic		0064-3L
	cvd		5	Sh/Clst: red brn, gn gy		0064-2L
			tr Ca	: dsk y brn, dol		0064-4L

Table 1 : Lithology description for well NOCS 33/9-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3350.00						0065
	cvd		65	Sh/Clst: lt gy to drk gy, calc		0065-1L
		4.05	30	Sh/Clst: brn blk, mic		0065-3L
	cvd		5	Sh/Clst: red brn, gn gy		0065-2L
			tr Ca	: dsk y brn, dol		0065-4L
3356.00						0066
	cvd		45	Sh/Clst: lt gy to drk gy, calc		0066-1L
			30	S/Sst : w, l		0066-4L
	cvd		20	Sh/Clst: brn blk, mic		0066-3L
	cvd		5	Sh/Clst: red brn, gn gy		0066-2L
3358.00	ccp					0124
		0.07	100	S/Sst : w to lt gy		0124-1L
3364.50	ccp			Brnt Middle Jurassic		0125
		0.06	100	S/Sst : w to lt gy		0125-1L
3365.00						0067
			90	Sh/Clst: lt gy to drk gy		0067-2L
			10	Sh/Clst: brn blk		0067-3L
			tr S/Sst	: w to lt gy		0067-1L
3370.70	ccp					0126
		0.10	100	S/Sst : w to lt gy		0126-1L

Table 1 : Lithology description for well NOCS 33/9-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3376.00	ccp					0127
	0.18	100	S/Sst	: w to lt gy		0127-1L
3377.00						0068
	cvd		90	Sh/Clst: lt gy to drk gy		0068-2L
	cvd		10	Sh/Clst: brn blk		0068-3L
			tr	S/Sst : w to lt gy		0068-1L
3383.00						0069
	cvd		50	Sh/Clst: lt gy to drk gy		0069-2L
			20	S/Sst : w to lt gy, cem		0069-1L
			20	Cont : Coal-ad		0069-4L
	cvd		10	Sh/Clst: brn blk		0069-3L
	cvd		tr	Sh/Clst: red brn, gy red		0069-5L
3389.00						0070
	cvd		60	Sh/Clst: lt gy to drk gy		0070-2L
	0.10		20	S/Sst : w to lt gy, cem		0070-1L
	cvd		10	Sh/Clst: brn blk		0070-3L
			10	Cont : Coal-ad		0070-4L
	cvd		tr	Sh/Clst: red brn, gy red		0070-5L
3395.00						0071
	cvd		60	Sh/Clst: lt gy to drk gy		0071-2L
			20	S/Sst : w to lt gy, cem		0071-1L
	cvd		10	Sh/Clst: brn blk		0071-3L
			10	Cont : Coal-ad		0071-4L
	cvd		tr	Sh/Clst: red brn, gy red		0071-5L

Table 1 : Lithology description for well NOCS 33/9-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3401.00						0072
	cvd		60	Sh/Clst: lt gy to drk gy		0072-2L
			20	S/Sst : w to lt gy, cem		0072-1L
	cvd		10	Sh/Clst: brn blk		0072-3L
			10	Cont : Coal-ad		0072-4L
	cvd		tr	Sh/Clst: red brn, gy red		0072-5L
3410.00						0073
	cvd	0.06	65	Sh/Clst: lt gy to drk gy		0073-2L
			20	S/Sst : w to lt gy, cem		0073-1L
	cvd		10	Sh/Clst: brn blk		0073-3L
			5	Cont : Coal-ad		0073-4L
	cvd		tr	Sh/Clst: red brn, gy red		0073-5L
3416.00						0074
	cvd		80	Sh/Clst: m gy to drk gy		0074-2L
			10	S/Sst : w to lt gy, mic, prp		0074-1L
	cvd		5	Sh/Clst: brn blk		0074-3L
			5	Cont : Coal-ad		0074-4L
	cvd		tr	Sh/Clst: red brn, gy red		0074-5L
3422.00						0075
	cvd		80	Sh/Clst: m gy to drk gy		0075-2L
	cvd		5	S/Sst : w to lt gy, mic, prp		0075-1L
	cvd		5	Sh/Clst: brn blk		0075-3L
			5	Cont : Coal-ad		0075-4L
			5	Sh/Clst: lt brn gy, slt		0075-6L
	cvd		tr	Sh/Clst: red brn, gy red		0075-5L



Table 1 : Lithology description for well NOCS 33/9-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3431.00						0076
	cvd	0.82	90	Sh/Clst: m gy to drk gy		0076-2L
	cvd		5	S/Sst : w to lt gy, mic, prp		0076-1L
	cvd		5	Sh/Clst: brn blk		0076-3L
			tr	Cont : Coal-ad		0076-4L
	cvd		tr	Sh/Clst: red brn, gy red		0076-5L
			tr	Sh/Clst: lt brn gy, slt		0076-6L
3437.00						0077
	cvd		55	Sh/Clst: m gy to drk gy		0077-2L
			30	Cont : Coal-ad		0077-4L
	cvd		5	S/Sst : w to lt gy, mic, prp		0077-1L
	cvd		5	Sh/Clst: brn blk		0077-3L
	cvd		5	Sh/Clst: red brn, gy red		0077-5L
			tr	Sh/Clst: lt brn gy, slt		0077-6L
3443.00						0078
		1.55	75	Sh/Clst: m gy to drk gy		0078-2L
			15	Sh/Clst: dsk y brn, wx		0078-3L
			10	Cont : Coal-ad		0078-4L
	cvd		tr	S/Sst : w to lt gy, mic, prp		0078-1L
	cvd		tr	Sh/Clst: red brn, gy red		0078-5L
			tr	Sh/Clst: lt brn gy, slt		0078-6L
3449.00						0079
			100	Sh/Clst: m gy to drk gy		0079-1L
			tr	Sh/Clst: dsk y brn, wx		0079-2L
			tr	Cont : Coal-ad		0079-3L

Table 1 : Lithology description for well NOCS 33/9-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3455.00						0080
	0.95	100	Sh/Clst:	m gy to drk gy		0080-1L
			tr Cont	: Coal-ad		0080-2L
3461.00						0081
		100	Sh/Clst:	m gy to drk gy		0081-1L
			tr Cont	: Coal-ad		0081-2L
3467.00						0082
	0.85	100	Sh/Clst:	m gy to drk gy		0082-1L
			tr Cont	: Coal-ad		0082-2L
3473.00						0083
		100	Sh/Clst:	m gy to drk gy		0083-1L
3479.00						0084
	0.92	100	Sh/Clst:	m gy to drk gy		0084-1L
			tr S/Sst	: w to lt gy, l		0084-2L
3485.00						0085
		100	Sh/Clst:	m gy to drk gy		0085-1L
			tr S/Sst	: w to lt gy, l		0085-2L
3491.00						0086
	1.05	100	Sh/Clst:	m gy to drk gy		0086-1L
			tr S/Sst	: w to lt gy, l		0086-2L

Table 1 : Lithology description for well NOCS 33/9-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3497.00						0087
				100 Sh/Clst: m gy to drk gy tr S/Sst : w to lt gy, l		0087-1L 0087-2L
3503.00						0088
	1.06			100 Sh/Clst: m gy to drk gy tr Sh/Clst: dsk y brn, l		0088-1L 0088-2L
3509.00						0089
				100 Sh/Clst: m gy to drk gy tr Sh/Clst: dsk y brn, l		0089-1L 0089-2L
3515.00						0090
	0.82			100 Sh/Clst: m gy to drk gy tr S/Sst : w to lt gy, l tr Sh/Clst: gy red		0090-1L 0090-2L 0090-3L
3521.00						0091
				95 Sh/Clst: m gy to drk gy 5 Sh/Clst: gy red tr S/Sst : w to lt gy, l		0091-1L 0091-3L 0091-2L
3527.00						0092
	0.79			90 Sh/Clst: m gy to drk gy 10 Sh/Clst: gy red tr S/Sst : w to lt gy, l tr Sh/Clst: dsk y brn, wx		0092-1L 0092-3L 0092-2L 0092-4L

Table 1 : Lithology description for well NOCS 33/9-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3533.00						0093
				90 Sh/Clst: m gy to drk gy		0093-1L
				10 Sh/Clst: gy red		0093-3L
				tr S/Sst : w to lt gy, l		0093-2L
				tr Sh/Clst: dsk y brn, wx		0093-4L
3539.00						0094
	0.89			90 Sh/Clst: m gy to drk gy		0094-1L
				10 Sh/Clst: gy red		0094-3L
				tr S/Sst : w to lt gy, l		0094-2L
				tr Sh/Clst: dsk y brn, wx		0094-4L
3545.00						0095
				70 Sh/Clst: m gy to drk gy		0095-1L
				20 Sh/Clst: gy red		0095-3L
				10 Other : w		0095-4L
				tr S/Sst : w to lt gy, l		0095-2L
3551.00						0096
				70 Sh/Clst: m gy to drk gy		0096-1L
				20 Sh/Clst: gy red		0096-3L
				10 Other : w		0096-4L
				tr S/Sst : w to lt gy, l		0096-2L
3557.00						0097
	0.80			70 Sh/Clst: m gy to drk gy		0097-1L
				20 Sh/Clst: gy red		0097-3L
				10 Other : w		0097-4L
				tr S/Sst : w to lt gy, l		0097-2L

Table 1 : Lithology description for well NOCS 33/9-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3563.00						0098
				80 Sh/Clst: m gy to drk gy		0098-1L
				20 Sh/Clst: gy red		0098-3L
				tr S/Sst : w to lt gy, l		0098-2L
3569.00						0099
				80 Sh/Clst: m gy to drk gy		0099-1L
				20 Sh/Clst: gy red		0099-3L
				tr S/Sst : w to lt gy, l		0099-2L
3575.00						0100
	0.83			80 Sh/Clst: m gy to drk gy		0100-1L
				20 Sh/Clst: gy red		0100-3L
				tr S/Sst : w to lt gy, l		0100-2L
3581.00						0101
				80 Sh/Clst: m gy to drk gy		0101-1L
				20 Sh/Clst: gy red		0101-3L
				tr S/Sst : w to lt gy, l		0101-2L
3587.00						0102
				70 Sh/Clst: m gy to drk gy		0102-1L
				30 Sh/Clst: gy red, gn gy		0102-3L
				tr S/Sst : w to lt gy, l		0102-2L
3593.00						0103
	0.67			70 Sh/Clst: m gy to drk gy		0103-1L
				30 Sh/Clst: gy red, gn gy		0103-3L
				tr S/Sst : w to lt gy, l		0103-2L

Table 1 : Lithology description for well NOCS 33/9-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3599.00						0104
				70 Sh/Clst: m gy to drk gy		0104-1L
				30 Sh/Clst: gy red, gn gy		0104-3L
				tr S/Sst : w to lt gy, l		0104-2L
3605.00						0105
				70 Sh/Clst: m gy to drk gy		0105-1L
				30 Sh/Clst: gy red, gn gy		0105-3L
				tr S/Sst : w to lt gy, l		0105-2L
3611.00						0106
	0.08			70 Sh/Clst: m gy to drk gy		0106-1L
				30 Sh/Clst: gy red, gn gy		0106-3L
				tr S/Sst : w to lt gy, l		0106-2L
3617.00						0107
				70 Sh/Clst: m gy to drk gy		0107-1L
				30 Sh/Clst: gy red, gn gy		0107-3L
				tr S/Sst : w to lt gy, l		0107-2L
3623.00						0108
				70 Sh/Clst: m gy to drk gy		0108-1L
				30 Sh/Clst: gy red, gn gy		0108-3L
				tr S/Sst : w to lt gy, l		0108-2L
3629.00						0109
	1.10			70 Sh/Clst: m gy to drk gy		0109-1L
				30 Sh/Clst: gy red, gn gy		0109-3L
				tr S/Sst : w to lt gy, l		0109-2L

Table 1 : Lithology description for well NOCS 33/9-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3635.00						0110
				50 Sh/Clst: m gy to drk gy		0110-1L
				50 Sh/Clst: gy red, gn gy		0110-3L
				tr S/Sst : w to lt gy, l		0110-2L
3641.00						0111
				50 Sh/Clst: m gy to drk gy		0111-1L
				50 Sh/Clst: gy red, gn gy		0111-3L
				tr S/Sst : w to lt gy, l		0111-2L
3647.00						0112
	0.08			50 Sh/Clst: m gy to drk gy		0112-1L
				50 Sh/Clst: gy red, gn gy		0112-3L
				tr S/Sst : w to lt gy, l		0112-2L
3653.00						0113
				50 Sh/Clst: m gy to drk gy		0113-1L
				50 Sh/Clst: gy red, gn gy		0113-3L
				tr S/Sst : w to lt gy, l		0113-2L
3659.00						0114
				70 Sh/Clst: gy red, gn gy		0114-2L
				30 Sh/Clst: m gy to drk gy		0114-1L
3665.00						0115
				70 Sh/Clst: gy red, gn gy		0115-2L
				30 Sh/Clst: m gy to drk gy		0115-1L

Table 1 : Lithology description for well NOCS 33/9-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3671.00						0116
				70 Sh/Clst: gy red, gn gy		0116-2L
				30 Sh/Clst: m gy to drk gy		0116-1L
3677.00						0117
				80 Sh/Clst: gy red		0117-2L
				20 Sh/Clst: m gy to drk gy		0117-1L
3683.00						0118
	0.13			80 Sh/Clst: gy red		0118-2L
				20 Sh/Clst: m gy to drk gy		0118-1L
3689.00						0119
				80 Sh/Clst: gy red		0119-2L
				20 Sh/Clst: m gy to drk gy		0119-1L
3695.00						0120
				80 Sh/Clst: gy red		0120-2L
				20 Sh/Clst: m gy to drk gy		0120-1L
3701.00						0121
				80 Sh/Clst: gy red		0121-2L
				20 Sh/Clst: m gy to drk gy		0121-1L
3707.00						0122
				90 Sh/Clst: gy red		0122-2L
				10 Sh/Clst: m gy to drk gy		0122-1L



Table 1 : Lithology description for well NOCS 33/9-10

Depth unit of measure: m

Depth	Type	Grp	Frm	Age	Trb	Sample
Int	Cvd	TOC%	%	Lithology description		
3713.00						0123
	0.10	90	Sh/Clst:	gy red		0123-2L
		10	Sh/Clst:	m gy to drk gy		0123-1L

Table 2 : Rock-Eval table for well NOCS 33/9--10

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
1901.00	cut	Sh/Clst: ol gy to lt ol gy	1.94	0.34	1.11	0.31	1.15	30	97	2.3	0.85	338	0001-1L
2021.00	cut	Sh/Clst: ol gy to lt ol gy	2.97	0.33	0.96	0.34	1.42	23	68	3.3	0.90	380	0005-1L
2111.00	cut	Sh/Clst: ol gy to lt ol gy	2.75	0.39	0.84	0.46	1.33	29	63	3.1	0.88	407	0008-1L
2201.00	cut	Sh/Clst: ol gy	1.44	0.42	0.65	0.65	1.18	36	55	1.9	0.77	383	0011-1L
2318.00	cut	Sh/Clst: ol gy to gn gy	2.11	0.55	0.56	0.98	1.12	49	50	2.7	0.79	364	0015-1L
2537.00	cut	Sh/Clst: ol gy to m gy	3.03	0.87	0.58	1.50	1.68	52	35	3.9	0.78	416	0022-1L
2630.00	cut	Sh/Clst: ol gy to m gy	4.06	1.46	0.57	2.56	1.87	78	30	5.5	0.74	413	0025-1L
2710.00	cut	Sh/Clst: ol gy to m gy to m drk gy	2.44	0.30	0.83	0.36	1.07	28	78	2.7	0.89	336	0028-1L
2852.00	cut	Sh/Clst: ol gy to m gy to m drk gy	1.37	0.21	0.43	0.49	0.73	29	59	1.6	0.87	383	0032-1L
2981.00	cut	Sh/Clst: ol gy to m gy to drk gy	1.17	0.15	0.26	0.58	0.57	26	46	1.3	0.89	347	0036-1L
3131.00	cut	Sh/Clst: lt gy to drk gy	0.66	0.02	0.28	0.07	0.61	3	46	0.7	0.97	328	0041-1L
3224.00	cut	Sh/Clst: lt gy to drk gy	0.88	0.14	0.50	0.28	0.98	14	51	1.0	0.86	337	0044-1L
3236.00	cut	Sh/Clst: lt gy to drk gy	0.93	0.18	0.88	0.20	1.03	17	85	1.1	0.84	338	0046-1L
3248.00	cut	Sh/Clst: lt gy to drk gy	0.58	0.19	0.49	0.39	0.91	21	54	0.8	0.75	336	0048-1L
3254.00	cut	Sh/Clst: lt gy to drk gy	0.38	0.16	0.60	0.27	1.08	15	56	0.5	0.70	336	0049-1L

Table 2 : Rock-Eval table for well NOCS 33/9-10

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
3266.00	cut	Sh/Clst: brn blk	3.05	20.67	1.68	12.30	6.87	301	24	23.7	0.13	434	0051-4L
3272.00	cut	Sh/Clst: brn blk	2.71	16.60	1.52	10.92	6.02	276	25	19.3	0.14	434	0052-4L
3290.00	cut	Sh/Clst: brn blk	2.84	15.41	1.73	8.91	4.86	317	36	18.3	0.16	428	0055-3L
3296.00	cut	Sh/Clst: brn blk	2.62	14.06	1.65	8.52	6.72	209	25	16.7	0.16	428	0056-3L
3302.00	cut	Sh/Clst: brn blk	2.33	11.30	1.51	7.48	3.47	326	44	13.6	0.17	429	0057-3L
3308.00	cut	Sh/Clst: brn blk	2.40	12.63	0.83	15.22	4.51	280	18	15.0	0.16	428	0058-3L
3314.00	cut	Sh/Clst: brn blk	2.49	13.38	0.90	14.87	4.05	330	22	15.9	0.16	429	0059-3L
3320.00	cut	Sh/Clst: brn blk	2.97	15.87	0.82	19.35	8.75	181	9	18.8	0.16	427	0060-3L
3326.00	cut	Sh/Clst: brn blk	2.62	15.47	1.48	10.45	8.40	184	18	18.1	0.14	429	0061-3L
3332.00	cut	Sh/Clst: brn blk	3.24	19.94	1.06	18.81	8.33	239	13	23.2	0.14	428	0062-3L
3338.00	cut	Sh/Clst: brn blk	3.25	18.85	0.93	20.27	10.38	182	9	22.1	0.15	429	0063-3L
3344.00	cut	Sh/Clst: brn blk	1.47	9.05	0.57	15.88	3.77	240	15	10.5	0.14	435	0064-3L
3350.00	cut	Sh/Clst: brn blk	1.11	6.35	0.62	10.24	4.05	157	15	7.5	0.15	439	0065-3L
3358.00	ccp	S/Sst : w to lt gy	0.03	0.01	0.44	0.02	0.07	14	629	-	0.75	426	0124-1L
3364.50	ccp	S/Sst : w to lt gy	0.40	0.01	0.51	0.02	0.06	17	850	0.4	0.98	436	0125-1L

Table 2 : Rock-Eval table for well NOCS 33/9-10

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
3370.70	ccp	S/Sst : w to lt gy	0.02	0.01	0.40	0.02	0.10	10	400	-	0.67	368	0126-1L
3376.00	ccp	S/Sst : w to lt gy	0.14	0.13	0.48	0.27	0.18	72	267	0.3	0.52	436	0127-1L
3389.00	cut	S/Sst : w to lt gy	0.05	0.03	0.38	0.08	0.10	30	380	0.1	0.63	417	0070-1L
3410.00	cut	S/Sst : w to lt gy	0.07	0.02	0.55	0.04	0.06	33	917	0.1	0.78	355	0073-1L
3431.00	cut	Sh/Clst: m gy to drk gy	0.28	0.10	0.30	0.33	0.82	12	37	0.4	0.74	426	0076-2L
3443.00	cut	Sh/Clst: dsk y brn	1.15	1.47	0.29	5.07	1.55	95	19	2.6	0.44	438	0078-3L
3455.00	cut	Sh/Clst: m gy to drk gy	0.32	0.14	0.27	0.52	0.95	15	28	0.5	0.70	334	0080-1L
3467.00	cut	Sh/Clst: m gy to drk gy	0.34	0.09	0.24	0.38	0.85	11	28	0.4	0.79	302	0082-1L
3479.00	cut	Sh/Clst: m gy to drk gy	0.24	0.12	0.20	0.60	0.92	13	22	0.4	0.67	338	0084-1L
3491.00	cut	Sh/Clst: m gy to drk gy	0.48	0.33	0.28	1.18	1.05	31	27	0.8	0.59	363	0086-1L
3503.00	cut	Sh/Clst: m gy to drk gy	0.42	0.18	0.13	1.38	1.06	17	12	0.6	0.70	344	0088-1L
3515.00	cut	Sh/Clst: m gy to drk gy	0.25	0.13	0.09	1.44	0.82	16	11	0.4	0.66	302	0090-1L
3527.00	cut	Sh/Clst: m gy to drk gy	0.27	0.10	0.07	1.43	0.79	13	9	0.4	0.73	302	0092-1L
3539.00	cut	Sh/Clst: m gy to drk gy	0.43	0.15	0.09	1.67	0.89	17	10	0.6	0.74	338	0094-1L
3557.00	cut	Sh/Clst: m gy to drk gy	0.31	0.11	0.10	1.10	0.80	14	13	0.4	0.74	335	0097-1L

Table 2 : Rock-Eval table for well NOCS 33/9-10

Depth unit of measure: m

Depth	Typ	Lithology	S1	S2	S3	S2/S3	TOC	HI	OI	PP	PI	Tmax	Sample
3575.00	cut	Sh/Clst: m gy to drk gy	0.28	0.17	0.09	1.89	0.83	20	11	0.5	0.62	337	0100-1L
3593.00	cut	Sh/Clst: m gy to drk gy	0.16	0.09	0.10	0.90	0.67	13	15	0.3	0.64	351	0103-1L
3611.00	cut	Sh/Clst: gy red, gn gy	0.06	0.02	0.07	0.29	0.08	25	88	0.1	0.75	275	0106-3L
3629.00	cut	Sh/Clst: m gy to drk gy	0.56	0.34	0.10	3.40	1.10	31	9	0.9	0.62	432	0109-1L
3647.00	cut	Sh/Clst: gy red, gn gy	0.07	0.03	0.11	0.27	0.08	38	138	0.1	0.70	366	0112-3L
3683.00	cut	Sh/Clst: gy red	0.21	0.07	0.16	0.44	0.13	54	123	0.3	0.75	279	0118-2L
3713.00	cut	Sh/Clst: gy red	0.17	0.13	0.11	1.18	0.10	130	110	0.3	0.57	346	0123-2L

Table 3 : Pyrolysis GC Data (S2 peak) as Percentage of Total Area for Well NOCS 33/9-10

Depth unit of measure: m

Depth	Typ	Lithology	C1	C2-C5	C6-C14	C15+	S2 from Rock-Eval	Sample
2630.00	cut	Sh/Clst: ol gy to m gy	4.67	26.23	33.17	35.93	1.46	0025-1L
3266.00	cut	Sh/Clst: brn blk	4.71	13.26	33.75	48.28	20.67	0051-4L
3308.00	cut	Sh/Clst: brn blk	2.59	14.07	34.12	49.22	12.63	0058-3L
3320.00	cut	Sh/Clst: brn blk	4.18	15.28	34.05	46.49	15.87	0060-3L
3338.00	cut	Sh/Clst: brn blk	4.53	15.06	38.35	42.06	18.85	0063-3L
3344.00	cut	Sh/Clst: brn blk	6.00	13.68	34.44	45.87	9.05	0064-3L
3364.50	ccp	S/Sst : w to lt gy	-	-	-	-	0.01	0125-1L
3443.00	cut	Sh/Clst: dsk y brn	8.81	21.78	45.98	23.43	1.47	0078-3L
3539.00	cut	Sh/Clst: m gy to drk gy	2.96	43.18	27.35	26.52	0.15	0094-1L
3629.00	cut	Sh/Clst: m gy to drk gy	3.75	35.22	25.34	35.70	0.34	0109-1L

Table 4 a: Weight of EOM and Chromatographic Fraction for well NOCS 33/9-10

Depth unit of measure: m

Depth	Typ	Lithology	Rock Extracted (g)	EOM (mg)	Sat (mg)	Aro (mg)	Asph (mg)	NSO (mg)	HC (mg)	Non-HC (mg)	TOC(e) (%)	Sample
2710.00	com	Composite sample - see table 4 e	2.4	12.7	5.5	4.0	0.4	2.8	9.5	3.2	1.20	0132-0B
3296.00	com	Composite sample - see table 4 e	3.0	9.8	3.3	2.8	1.0	2.7	6.1	3.7	5.91	0128-0B
3314.00	com	Composite sample - see table 4 e	4.7	14.2	4.6	4.4	1.8	3.4	9.0	5.2	5.55	0129-0B
3320.00	cut	Sh/Clst: brn blk	3.6	17.1	4.8	6.1	2.7	3.6	10.9	6.3	7.78	0060-3L
3338.00	com	Composite sample - see table 4 e	5.0	22.4	6.5	7.7	3.4	4.8	14.2	8.2	7.92	0130-0B
3350.00	com	Composite sample - see table 4 e	2.8	5.7	2.5	1.6	0.3	1.2	4.2	1.5	3.42	0131-0B
3364.50	ccp	S/Sst : w to lt gy	6.4	19.8	9.5	4.1	0.3	5.9	13.6	6.2	0.43	0125-1L
3503.00	com	Composite sample - see table 4 e	5.1	4.3	1.7	0.6	0.2	1.8	2.3	2.0	0.75	0137-0B

Depth unit of measure: m

Depth	Typ	Lithology	EOM	Sat	Aro	Asph	NSO	HC	Non-HC	Sample
2710.00	com	Composite sample - see table 4 e	5381	2330	1694	169	1186	4025	1355	0132-0B
3296.00	com	Composite sample - see table 4 e	3322	1118	942	338	922	2061	1261	0128-0B
3314.00	com	Composite sample - see table 4 e	2995	966	932	379	717	1898	1097	0129-0B
3320.00	cut	Sh/Clst: brn blk	4723	1317	1679	745	980	2997	1726	0060-3L
3338.00	com	Composite sample - see table 4 e	4507	1303	1545	684	973	2849	1657	0130-0B
3350.00	com	Composite sample - see table 4 e	2000	894	578	105	421	1473	526	0131-0B
3364.50	ccp	S/Sst : w to lt gy	3069	1472	635	46	914	2108	961	0125-1L
3503.00	com	Composite sample - see table 4 e	838	331	116	38	350	448	389	0137-0B



Table 4 c: Concentration of EOM and Chromatographic Fraction (mg/g TOC(e)) for well NOCS 33/9-10

Depth unit of measure: m

Depth	Typ	Lithology	EOM	Sat	Aro	Asph	NSO	HC	Non-HC	Sample
2710.00	com	Composite sample - see table 4 e	448.45	194.21	141.24	14.12	98.87	335.45	112.99	0132-0B
3296.00	com	Composite sample - see table 4 e	56.21	18.93	15.95	5.74	15.60	34.87	21.34	0128-0B
3314.00	com	Composite sample - see table 4 e	53.98	17.41	16.80	6.84	12.92	34.21	19.77	0129-0B
3320.00	cut	Sh/Clst: brn blk	60.72	16.94	21.59	9.59	12.60	38.52	22.19	0060-3L
3338.00	com	Composite sample - see table 4 e	56.91	16.46	19.51	8.64	12.30	35.97	20.93	0130-0B
3350.00	com	Composite sample - see table 4 e	58.48	26.16	16.93	3.08	12.31	43.09	15.39	0131-0B
3364.50	ccp	S/Sst : w to lt gy	713.90	342.53	147.83	10.82	212.73	490.36	223.54	0125-1L
3503.00	com	Composite sample - see table 4 e	111.76	44.18	15.59	5.20	46.78	59.78	51.98	0137-0B

Table 4 d: Composition of material extracted from the rock (%) for well NOCS 33/9-10

Depth unit of measure: m

Depth	Typ	Lithology	Sat	Aro	Asph	NSO	HC	Non-HC	Sat	HC	Sample
			EOM	EOM	EOM	EOM	EOM	EOM	Aro	Non-HC	
2710.00	com	Composite sample - see table 4 e	43.31	31.50	3.15	22.05	74.80	25.20	137.50	296.88	0132-0B
3296.00	com	Composite sample - see table 4 e	33.67	28.37	10.20	27.76	62.04	37.96	118.71	163.44	0128-0B
3314.00	com	Composite sample - see table 4 e	32.25	31.13	12.68	23.94	63.38	36.62	103.62	173.08	0129-0B
3320.00	cut	Sh/Clst: brn blk	27.89	35.56	15.79	20.76	63.45	36.55	78.45	173.60	0060-3L
3338.00	com	Composite sample - see table 4 e	28.93	34.29	15.18	21.61	63.21	36.79	84.38	171.84	0130-0B
3350.00	com	Composite sample - see table 4 e	44.74	28.95	5.26	21.05	73.68	26.32	154.55	280.00	0131-0B
3364.50	ccp	S/Sst : w to lt gy	47.98	20.71	1.52	29.80	68.69	31.31	231.71	219.35	0125-1L
3503.00	com	Composite sample - see table 4 e	39.53	13.95	4.65	41.86	53.49	46.51	283.33	115.00	0137-0B

Depth unit of measure: m

NOTE: Depths shown in tables 4 a to d correspond to the composite samples' lower depth.

Upper depth	Lower depth	Typ	Sample	Depth	Typ	Lithology	Sample
2318.00	2710.00	com	0132-0B is composed of:	2318.00	cut	Sh/Clst: ol gy to gn gy	0015-1L
				2537.00	cut	Sh/Clst: ol gy to m gy	0022-1L
				2630.00	cut	Sh/Clst: ol gy to m gy	0025-1L
				2710.00	cut	Sh/Clst: ol gy to m gy to m drk gy	0028-1L
3266.00	3296.00	com	0128-0B is composed of:	3266.00	cut	Sh/Clst: brn blk, mic	0051-4L
				3272.00	cut	Sh/Clst: brn blk, mic	0052-4L
				3290.00	cut	Sh/Clst: brn blk, mic	0055-3L
				3296.00	cut	Sh/Clst: brn blk, mic	0056-3L
3302.00	3314.00	com	0129-0B is composed of:	3302.00	cut	Sh/Clst: brn blk, mic	0057-3L
				3308.00	cut	Sh/Clst: brn blk, mic	0058-3L
				3314.00	cut	Sh/Clst: brn blk, mic	0059-3L
3326.00	3338.00	com	0130-0B is composed of:	3326.00	cut	Sh/Clst: brn blk, mic	0061-3L
				3332.00	cut	Sh/Clst: brn blk, mic	0062-3L
				3338.00	cut	Sh/Clst: brn blk, mic	0063-3L
3344.00	3350.00	com	0131-0B is composed of:	3344.00	cut	Sh/Clst: brn blk, mic	0064-3L
				3350.00	cut	Sh/Clst: brn blk, mic	0065-3L
3455.00	3503.00	com	0137-0B is composed of:	3455.00	cut	Sh/Clst: m gy to drk gy	0080-1L
				3467.00	cut	Sh/Clst: m gy to drk gy	0082-1L
				3479.00	cut	Sh/Clst: m gy to drk gy	0084-1L
				3491.00	cut	Sh/Clst: m gy to drk gy	0086-1L
				3503.00	cut	Sh/Clst: m gy to drk gy	0088-1L

Table 5 : Saturated Hydrocarbon Ratios for well NOCS 33/9-10

Depth unit of measure: m

Depth	Typ	Lithology	Pristane	Pristane	Pristane + Phytane	Phytane	CPI	Sample
			nC17	Phytane	nC17 + nC18	nC18		
2710.00	com	bulk	0.41	1.96	0.41	0.42	1.29	0132-0B
3296.00	com	bulk	0.75	1.34	0.77	0.82	0.97	0128-0B
3314.00	com	bulk	1.07	1.37	1.01	0.93	0.90	0129-0B
3320.00	cut	Sh/Clst: brn blk	1.03	1.38	0.97	0.91	1.00	0060-3L
3338.00	com	bulk	1.02	1.42	0.99	0.95	1.08	0130-0B
3350.00	com	bulk	0.85	1.68	0.79	0.70	1.11	0131-0B
3364.50	ccp	S/Sst : w to lt gy	0.83	1.82	0.63	0.43	3.98	0125-1L
3503.00	com	bulk	0.41	2.22	0.39	0.37	2.04	0137-0B

Table 6 : Aromatic Hydrocarbon Ratios for well NOCS 33/9-10

Depth unit of measure: m

Depth	Typ	Lithology	MNR	DMNR	BPhR	2/1MP	MPI1	MPI2	Rc	DBT/P	4/1MDBT	(3+2) /1MDBT	Sample
2710.00	com	bulk	1.11	1.79	0.14	1.51	0.90	1.07	0.94	0.58	23.16	1.95	0132-0B
3296.00	com	bulk	-	0.85	-	0.82	0.69	0.58	0.81	0.34	1.53	0.27	0128-0B
3314.00	com	bulk	-	0.81	-	0.76	0.65	0.60	0.79	0.40	1.12	0.30	0129-0B
3320.00	cut	Sh/Clst: brn blk	0.37	1.08	0.04	0.64	0.52	0.46	0.71	0.45	1.24	0.38	0060-3L
3338.00	com	bulk	0.41	1.25	0.04	0.70	0.60	0.55	0.76	0.35	1.62	0.46	0130-0B
3350.00	com	bulk	0.80	1.53	0.11	0.78	0.60	0.56	0.76	0.27	2.40	0.44	0131-0B
3364.50	ccp	S/Sst : w to lt gy	-	-	-	-	-	-	0.40	-	-	-	0125-1L
3503.00	com	bulk	-	1.12	0.04	1.52	0.84	0.71	0.90	0.38	26.78	1.73	0137-0B

Table 7 : Thermal Maturity Data for well NOCS 33/9-10

Depth unit of measure: m

Depth	Typ	Lithology	Vitrinite Reflectance (%)	Number of Readings	Standard Deviation	Spore Fluorescence Colour	SCI	T <sub>max</sub> (°C)	Sample
2348.00	cut	bulk	0.45	4	0.05	3-4	-	-	0016-0B
2570.00	cut	bulk	0.37	3	0.01	3-4	-	-	0023-0B
2630.00	cut	Sh/Clst: ol gy to m gy	-	-	-	-	3.5-4.0(?)	413	0025-1L
2753.00	cut	bulk	0.39	7	0.04	4	-	-	0029-0B
2810.00	cut	bulk	0.41	2	0.06	4	-	-	0031-0B
2951.00	cut	bulk	0.36	2	0.07	4	-	-	0035-0B
3101.00	cut	bulk	NDP	-	-	0	-	-	0040-0B
3230.00	cut	bulk	0.68	1	0.00	4	-	-	0045-0B
3266.00	cut	Sh/Clst: brn blk	-	-	-	-	4.5-5.0(?)	434	0051-4L
3290.00	cut	bulk	0.59	8	0.07	4+5	-	-	0055-0B
3320.00	cut	Sh/Clst: brn blk	-	-	-	-	4.0	427	0060-3L
3326.00	cut	bulk	0.60	12	0.06	0	-	-	0061-0B
3338.00	cut	Sh/Clst: brn blk	-	-	-	-	4.5-5.0	429	0063-3L
3422.00	cut	bulk	0.67	1	0.00	4	-	-	0075-0B

Table 7 : Thermal Maturity Data for well NOCS 33/9-10

Depth unit of measure: m

Depth	Typ	Lithology	Vitrinite Reflectance (%)	Number of Readings	Standard Deviation	Spore Fluorescence Colour	SCI	T <sub>max</sub> (°C)	Sample
3443.00	cut	Sh/Clst: dsk y brn	-	-	-	-	4.5-5.0	438	0078-3L
3491.00	cut	Sh/Clst: m gy to drk gy	-	-	-	-	5.0	363	0086-1L
3509.00	cut	bulk	0.65	3	0.11	0	-	-	0089-0B
3539.00	cut	Sh/Clst: m gy to drk gy	-	-	-	-	NDP	338	0094-1L
3617.00	cut	bulk	0.67	4	0.03	5	-	-	0107-0B
3629.00	cut	Sh/Clst: m gy to drk gy	-	-	-	-	5.0	432	0109-1L
3707.00	cut	bulk	NDP	-	-	0	-	-	0122-0B

Table 8 : Visual Kerogen Composition Data for well NOCS 33/9-10

Depth unit of measure: m

Depth	Typ	Lithology	L	A	L	S	C	D	I	S	I	M	S	V	C	V	A	Sample		
			%	L	t	l	l	n	e	l	%	n	s	t	n	o	I		%	n
2630.00	cut	Sh/Clst: ol gy to m gy	25	*	*	*		*	*	*	60		*	15	*	**		0025-1L		
3266.00	cut	Sh/Clst: brn blk	85	**	*	*		**	*		10		*	5	*			0051-4L		
3320.00	cut	Sh/Clst: brn blk	80	**		*	*	**	*		15	*	*	5	*		*	0060-3L		
3338.00	cut	Sh/Clst: brn blk	75	**		*		**	*	*	15	**	*	10	**		*	0063-3L		
3443.00	cut	Sh/Clst: dsk y brn	35			*		*			10	*	**	55	**	*		0078-3L		
3491.00	cut	Sh/Clst: m gy to drk gy	5			*	*	*	*		40	*	**	55	**	*		0086-1L		
3539.00	cut	Sh/Clst: m gy to drk gy	NDP								NDP			NDP				0094-1L		
3629.00	cut	Sh/Clst: m gy to drk gy	20			*		*	*		50	*	**	30	*			0109-1L		



Table 9a : Tabulation of carbon isotope data for EOM/EOM - fractions or Oils for well NOCS 33/9-10

Depth unit of measure: m

Depth	Typ	Lithology	EOM/Oil	Saturated	Aromatic	NSO	Asphaltenes	Kerogen	Sample
3314.00	com	Composite sample	-29.22	-30.25	-29.09	-29.12	-27.95	-	0129-0B
3350.00	com	Composite sample	-	-29.01	-27.77	-27.93	-26.22	-	0131-0B
3364.50	ccp		-26.74	-27.08	-26.37	-26.76	-27.28	-	0125-1L

Table 9b : Tabulation of cv values from carbon isotope data for well NOCS 33/9-10

Depth unit of measure: m

Depth	Typ	Lithology	Saturated	Aromatic	cv value	Sample
3314.00	com	Composite sample	-30.25	-29.09	0.30	0129-0B
3350.00	com	Composite sample	-29.01	-27.77	0.10	0131-0B
3364.50	ccp		-27.08	-26.37	-1.68	0125-1L

Table 10A: Variation in Triterpane Distribution for Well NOCS 33/9-10

Depth unit of measure: m

Depth	Lithology	B/A	B/B+A	B		C/E	C/C+E	X/E	Z/E	Z/C	Z/Z+E	Q/E	E/E+F	C+D		J1		Sample
				B+E+F										C+D+E+F	D+F/C+E	J1+J2%		
3314.00	Sh/Clst	1.98	0.66	0.13	0.45	0.31	0.08	0.22	0.50	0.18	0.03	0.89	0.30	0.12	58.31		0129-0	
3350.00	Sh/Clst	4.70	0.82	0.20	0.53	0.34	0.06	0.10	0.19	0.09	0.02	0.86	0.34	0.15	63.46		0131-0	
3364.50	S/Sst	1.70	0.63	0.43	1.02	0.51	-	0.49	0.48	0.33	2.89	0.93	0.51	0.09	65.44		0125-1	

Table 10B: Variation in Sterane Distribution (peak height) for Well NOCS 33/9-10

Depth unit of measure: m

Depth	Lithology	Ratio1	Ratio2	Ratio3	Ratio4	Ratio5	Ratio6	Ratio7	Ratio8	Ratio9	Ratio10	Sample
3314.00	Sh/Clst	0.62	43.59	69.29	1.15	0.72	0.13	0.10	0.53	0.77	2.00	0129-0
3350.00	Sh/Clst	0.61	44.18	69.65	0.84	0.72	0.16	0.13	0.53	0.79	2.06	0131-0
3364.50	S/Sst	0.49	56.38	80.25	0.93	0.78	0.55	0.42	0.67	1.29	4.66	0125-1

Ratio1:  $a / a + j$   
 Ratio2:  $q / q + t * 100\%$   
 Ratio3:  $2(r + s) / (q + t + 2(r + s)) * 100\%$   
 Ratio4:  $a + b + c + d / h + k + l + n$   
 Ratio5:  $r + s / r + s + q$

Ratio6:  $u + v / u + v + q + r + s + t$   
 Ratio7:  $u + v / u + v + i + m + n + q + r + s + t$   
 Ratio8:  $r + s / q + r + s + t$   
 Ratio9:  $q / t$   
 Ratio10:  $r + s / t$

Table 10C: Raw GCMS triterpane data (peak height) for Well NOCS 33/9-10

Depth unit of measure: m

Depth	Lithology	p	q	r	s	t	a	b	z	c	Sample
		x	d	e	f	g	h	i	j1		
		j2	k1	k2	l1	l2	m1	m2			
3314.00	Sh/Clst	17.34	8.82	9.42	7.30	3.85	23.91	47.35	60.37	121.50	0129-0
		22.08	12.19	271.39	35.26	136.92	98.91	16.80	90.63		
		64.81	67.20	43.79	49.97	28.67	42.36	26.84			
3350.00	Sh/Clst	7.91	2.15	1.58	3.87	0.00	6.86	32.21	11.30	59.91	0131-0
		6.45	7.25	114.08	18.12	55.73	36.95	8.46	29.99		
		17.27	17.85	11.30	12.70	7.72	10.33	4.75			
3364.50	S/Sst	299.66	149.01	118.98	37.70	48.56	24.53	41.72	25.29	52.75	0125-1
		0.00	5.40	51.48	4.13	10.78	6.68	0.00	4.26		
		2.25	0.00	0.00	0.00	0.00	0.00	0.00			

Table 10D: Raw GCMS sterane data (peak height) for Well NOCS 33/9-10

Depth unit of measure: m

Depth	Lithology	u	v	a	b	c	d	e	f	g	Sample
		h	i	j	k	l	m	n	o		
		p	q	r	s	t					
3314.00	Sh/Clst	13.53	11.16	94.03	59.21	22.21	44.11	44.11	36.16	50.99	0129-0
		80.25	24.92	56.59	53.66	29.84	0.00	27.19	36.32		
		32.89	34.47	44.61	44.61	44.60					
3350.00	Sh/Clst	4.90	3.92	23.98	15.66	2.19	9.66	11.94	7.20	14.19	0131-0
		26.68	6.99	15.40	17.81	9.67	0.00	7.39	8.50		
		8.66	9.34	12.13	12.13	11.80					
3364.50	S/Sst	42.51	30.87	24.35	14.27	8.55	18.15	17.11	13.73	29.46	0125-1
		41.89	30.40	25.69	14.56	3.01	0.00	10.83	15.40		
		9.61	11.14	20.07	20.07	8.62					

Table 10E: Aromatisation of Steranes for Well NOCS 33/9-10

Depth unit of measure: m

Depth	Lithology	Ratio1	Ratio2	Sample
3314.00	Sh/Clst	0.34	0.89	0129-0
3350.00	Sh/Clst	0.30	0.92	0131-0
3364.50	S/Sst	0.91	0.65	0125-1

$$\text{Ratio1: } \frac{\text{C1+D1+E1+F1+G1+H1+I1}}{\text{C1+D1+E1+F1+G1+H1+I1} + \text{c1+d1+e1+f1+g1}}$$

$$\text{Ratio2: } \text{g1} / \text{g1} + \text{I1}$$

Table 10F: Variation in Triaromatic Sterane Distribution for Well NOCS 33/9-10

Depth unit of measure: m

Depth	Lithology	Ratio1	Ratio2	Ratio3	Ratio4	Ratio5	Sample
3314.00	Sh/Clst	0.40	0.38	0.14	0.15	0.18	0129-0
3350.00	Sh/Clst	0.33	0.31	0.12	0.13	0.17	0131-0
3364.50	S/Sst	0.55	0.57	0.22	0.22	0.24	0125-1

Ratio1:  $a1 / a1 + g1$

Ratio2:  $b1 / b1 + g1$

Ratio3:  $a1 + b1 / a1 + b1 + c1 + d1 + e1 + f1 + g1$

Ratio4:  $a1 / a1 + e1 + f1 + g1$

Ratio5:  $a1 / a1 + d1$



Table 10G: Variation in Monoaromatic Sterane Distribution for Well NOCS 33/9-10

Depth unit of measure: m

Depth	Lithology	Ratio1	Ratio2	Ratio3	Ratio4	Sample
3314.00	Sh/Clst	0.21	0.16	0.12	0.10	0129-0
3350.00	Sh/Clst	0.26	0.16	0.14	0.10	0131-0
3364.50	S/Sst	0.06	0.07	0.03	0.04	0125-1

Ratio1: A1 / A1 + E1  
 Ratio2: B1 / B1 + E1

Ratio3: A1 / A1 + E1 + G1  
 Ratio4: A1+B1 / A1+B1+C1+D1+E1+F1+G1+H1+I1

Table 10H: Raw GCMS trioaromatic sterane data (peak height) for Well NOCS 33/9-10

Depth unit of measure: m

Depth	Lithology	a1	b1	c1	d1	e1	f1	g1	Sample
3314.00	Sh/Clst	420.78	382.70	789.61	1965.37	767.56	963.68	622.11	0129-0
3350.00	Sh/Clst	198.50	185.75	429.34	972.26	514.61	442.84	407.73	0131-0
3364.50	S/Sst	16.12	17.62	11.47	52.35	23.61	20.54	13.17	0125-1

Table 10I: Raw GCMS monoaromatic sterane data (peak height) for Well NOCS 33/9-10

Depth unit of measure: m

Depth	Lithology	a1	b1	c1	d1	e1	f1	g1	h1	i1	Sample
3314.00	Sh/Clst	181.70	130.84	438.77	348.48	688.16	147.47	629.65	362.35	74.96	0129-0
3350.00	Sh/Clst	89.87	49.75	188.12	146.96	251.83	78.93	287.94	207.61	33.45	0131-0
3364.50	S/Sst	24.70	30.95	186.68	178.35	404.93	47.21	314.77	156.50	7.23	0125-1